

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

U. S. PATENT DOCUMENTS

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Pgs or Relevant Figs Appear
	1.	1771928		1930-07-29	Jung	
	2.	2205854		1940-06-25	Kroll	
	3.	2607675		1952-08-19	Gross	
	4.	2647826		1953-08-04	Jordan	
	5.	2816828		1957-12-17	Benedict et al.	
	6.	2823991		1958-02-18	Kamlet	
	7.	2827371		1958-03-18	Quin	
	8.	2835567		1958-05-20	Willcox	
	9.	2846303		1958-08-05	Keller et al.	
	10.	2846304		1958-08-05	Keller et al.	
	11.	2882143		1959-04-14	Schmidt	
	12.	2882144		1959-04-14	Follows et al.	
	13.	2890112		1959-06-09	Winter	
	14.	2895823		1959-07-21	Lynskey	
	15.	2915382		1959-12-01	Hellier et al.	
	16.	2941867		1960-06-21	Maurer	
	17.	2944888		1960-07-12	Quin	
	18.	3058820		1962-10-16	Whitehurst	
	19.	3067025		1962-12-04	Chisholm	
	20.	3085871		1963-04-16	Griffiths	
	21.	3085872		1963-04-16	Kenneth	
	22.	3113017		1963-12-03	Homme	
	23.	3331666		1967-07-18	Robinson et al.	
	24.	3519258		1970-07-07	Ishizuka	
	25.	3535109		1970-10-20	Ingersoll	
	26.	3650681		1972-03-21	Sugahara et al.	
	27.	3825415		1974-07-23	Johnston et al.	
	28.	3836302		1974-09-17	Kaukeinen	
	29.	3847596		2006-03-16	Holland et al.	
	30.	3867515		1975-02-18	Bohl et al.	
	31.	3919087		1975-11-11	Brumagim	
	32.	3927993		1975-12-23	Griffin	
	33.	3943751		1976-03-16	Akiyama et al.	
	34.	3966460		1976-06-29	Spink	
	35.	4007055		1977-02-08	Whittingham	
	36.	4009007		1977-02-22	Fry	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

U. S. PATENT DOCUMENTS

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pgs. Col., Lns, where Relevant Figs or Relevant Figs Appear
	37.	4017302		1977-04-12	Bates et al.	
	38.	4070252		1978-01-24	Bonsack	
	39.	4128421		1978-12-05	Marsh et al.	
	40.	4141719		1979-02-27	Hakko	
	41.	4149876		1979-04-17	Rerat	
	42.	4190442		1980-02-26	Patel	
	43.	4331477		1982-05-25	Kubo et al.	
	44.	4379718		1983-04-12	Grantham et al.	
	45.	4401467		1983-08-30	Jordan	
	46.	4402741		1983-09-06	Pollet et al.	
	47.	4414188		1983-11-08	Becker	
	48.	4423004		1983-12-27	Ross	
	49.	4425217		1984-01-10	Beer	
	50.	4432813		1984-02-21	Williams	
	51.	4445931		1984-05-01	Worthington	
	52.	4454169		1984-06-12	Hinden et al.	
	53.	4518426		1985-05-21	Murphy	
	54.	4519837		1985-05-28	Down	
	55.	4521281		1985-06-04	Kadija	
	56.	4555268		1985-11-26	Getz	
	57.	4556420		1985-12-03	Evans et al.	
	58.	4604368		1986-08-05	Reeve	
	59.	4606902		1986-08-19	Ritter	
	60.	4687632		1987-08-18	Hurd	
	61.	4689129		1987-08-25	Knudsen	
	62.	4725312		1988-02-16	Seon et al.	
	63.	4828008		1989-05-09	White et al.	
	64.	4830665		1989-05-16	Winand	
	65.	4839120		1989-06-13	Baba et al.	
	66.	4877445		1989-10-31	Okudaira et al.	
	67.	4897116		1990-01-30	Scheel	
	68.	4902341		1990-02-20	Okudaira et al.	
	69.	4915729		1990-04-10	Boswell et al.	
	70.	4923577		1990-05-08	McLaughlin et al.	
	71.	4940490		1990-07-10	Fife et al.	
	72.	4941646		1990-07-17	Stelts et al.	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

U. S. PATENT DOCUMENTS

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pgs. Col., Lns, where Relevant Pgs or Relevant Figs Appear
	73.	4985069		1991-01-15	Traut	
	74.	5028491		1991-07-02	Huang et al.	
	75.	5032176		1991-07-16	Kametani et al.	
	76.	5055280		1991-10-08	Nakatani et al.	
	77.	5064463		1991-11-12	Ciomek	
	78.	5082491		1992-01-21	Rerat	
	79.	5147451		1992-09-15	Leland	
	80.	5149497		1992-09-22	McKee et al.	
	81.	5160428		1992-11-03	Kuri	
	82.	5164346		1992-11-17	Giunchi et al.	
	83.	5167271		1992-12-01	Lange et al.	
	84.	5176741		1993-01-05	Bartlett et al.	
	85.	5176810		1993-01-05	Volotinen et al.	
	86.	5211741		1993-05-18	Fife	
	87.	5259862		1993-11-09	White et al.	
	88.	5338379		1994-08-16	Kelly	
	89.	5356120		1994-10-18	König et al.	
	90.	5427602		1995-06-27	DeYoung et al.	
	91.	5437854		1995-08-01	Walker et al.	
	92.	5439750		1995-08-08	Ravenhall et al.	
	93.	5448447		1995-09-05	Chang	
	94.	5460642		1995-10-24	Leland	
	95.	5498446		1996-03-12	Axelbaum et al.	
	96.	5580516		1996-12-03	Kumar	
	97.	5637816		1997-06-10	Schneibel	
	98.	5779761		1998-07-14	Armstrong et al.	
	99.	5897830		1999-04-27	Abkowitz et al.	
	100.	5914440		1999-06-22	Celik et al.	
	101.	5948495		1999-09-07	Stanish et al.	
	102.	5951822		1999-09-14	Knapick et al.	
	103.	5954856		1999-09-21	Pathare et al.	
	104.	5958106		1999-09-28	Armstrong et al.	
	105.	5986877		1999-11-16	Pathare et al.	
	106.	5993512		1999-11-30	Pargeter et al.	
	107.	6010661		2000-01-04	Abe et al.	
	108.	6027585		2000-02-22	Patterson et al.	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

U. S. PATENT DOCUMENTS

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pgs. Col., Lns, where Relevant Pags or Relevant Figs Appear
	109.	6040975		2000-03-21	Mimura	
	110.	6099664		2000-08-08	Davies	
	111.	6103651		2000-08-15	Leitzel	
	112.	6136062		2000-10-24	Loffeholz et al.	
	113.	6180258		2001-01-30	Klier	
	114.	6193779		2001-02-27	Reichert et al.	
	115.	6210461		2001-04-03	Elliott	
	116.	6238456		2001-05-29	Wolf et al.	
	117.	6309570		2001-10-30	Fellabaum	
	118.	6309595		2001-10-30	Rosenberg et al.	
	119.	6409797		2002-06-25	Armstrong et al.	
	120.	6432161		2002-08-13	Oda et al.	
	121.	6488073		2002-12-03	Blenkinsop et al.	
	122.	6502623		2003-01-07	Schmitt	
	123.	6602482		2003-08-05	Kohler et al.	
	124.	6689187		2004-02-10	Oda	
	125.	6727005		2004-04-27	Gimondo et al.	
	126.	6745930		2004-06-08	Schmitt	
	127.	6824585		2004-11-30	Joseph et al.	
	128.	6861038		2005-03-01	Armstrong et al.	
	129.	6884522		2005-04-26	Adams et al.	
	130.	6902601		2005-06-07	Nie et al.	
	131.	6921510		2005-07-26	Ott et al.	
	132.	6955703		2005-10-18	Zhou et al.	
	133.	7041150		2006-05-09	Armstrong et al.	
	134.	7351272		2008-04-01	Armstrong et al.	
	135.	7410610		2008-08-12	Woodfield et al.	
	136.	7435282		2008-10-14	Armstrong et al.	
	137.	7445658		2008-11-04	Armstrong et al.	
	138.	7501007		2009-03-10	Anderson et al.	
	139.	7501089		2009-03-10	Armstrong et al.	
	140.	H1642		1997-04-01	Ogden	
	141.	RE32260		1986-10-07	Fry	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

U. S. PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Pgs or Relevant Figs Appear
	1.	2002/0050185		2002-05-02	Oda	
	2.	2002/0152844		2002-10-24	Armstrong et al.	
	3.	2003/0061907		2003-04-03	Armstrong et al.	
	4.	2003/0145682		2002-09-10	Anderson et al.	
	5.	2004/0123700		2004-07-01	Zhou et al.	
	6.	2005/0081682		2005-04-21	Armstrong et al.	
	7.	2005/0150576		2005-07-14	Venigalla	
	8.	2005/0225014		2005-10-13	Armstrong et al.	
	9.	2005/0284824		2005-12-19	Anderson et al.	
	10.	2006/0086435		2006-04-27	Anderson et al.	
	11.	2006/0107790		2006-05-25	Anderson et al.	
	12.	2006/0123950		2006-06-15	Anderson et al.	
	13.	2006/0150769		2006-07-13	Armstrong et al.	
	14.	2006/0230878		2006-10-19	Anderson et al.	
	15.	2007/0017319		2007-01-25	Jacobsen et al.	
	16.	2007/0079908		2007-04-12	Jacobsen et al.	
	17.	2007/0180951		2007-08-09	Armstrong et al.	
	18.	2008/0031766		2008-02-07	Dariusz et al.	
	19.	2008/0152533		2008-06-26	Ernst et al.	
	20.	2008/0187455		2008-08-07	Armstrong et al.	
	21.	2008/0199348		2008-08-21	Armstrong et al.	
	22.	2007/0180952		2007-08-09	Lanin et al.	
	23.	2006/0102255		2006-05-18	Woodfield et al.	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

FOREIGN PATENT DOCUMENTS								
Exam. Initial*	Cite No	Foreign Document Number*	Country code*	Kind Code*	Publication Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Passes or Relevant Figs Appear	T ⁶
	1.	AU2003263081			2004-06-18	Anderson et al.		
	2.	AU587782			1985-11-28	Martin		
	3.	CA2196534			1996-02-15	Armstrong et al.		
	4.	EA006615						
	5.	EA007634						
	6.	EP0298698			1989-01-11	Okudaira et al.		
	7.	EP0299791			1989-01-18	Okudaira et al.		
	8.	EP1441039			2004-07-28	Ott et al.		
	9.	EP1657317			2006-05-17	Woodfield et al.		
	10.	GB722184			1955-01-19	Levy et al.		
	11.	GB778021			1957-07-03			
	12.	JP62065921			1987-03-25	Murayama et al.		
	13.	JP05078762			1993-03-30	Kazuhiisa		
	14.	JP10502418			1998-03-03	Armstrong et al.		
	15.	JP11090692			1999-04-06	Takashi et al.		
	16.	JP2001279345			2001-10-10	Naofumi et al.		
	17.	JP31007808			1956-09-08	Tomonari		
	18.	JP4116161			1992-04-16	Akitoshi		
	19.	JP49042518			1974-04-22			
	20.	JP51010803			1976-04-07			
	21.	JP60255300			1985-12-16	Yoshiro		
	22.	JP6112837			1986-01-21	Hiroshi		
	23.	JP64047823			1989-02-22	Shigenori et al.		
	24.	NO90840			1958-01-27	Langmyhr		
	25.	RU411962			1974-01-25	Yevdokimov		
	26.	WO96/04407			1996-02-15	Armstrong et al.		
	27.	WO98/24575			1998-06-11	Abkowitz et al.		
	28.	WO2004/022269			2004-03-18	Anderson et al.		
	29.	WO2004/022797			2004-03-18	Anderson et al.		
	30.	WO2004/022798			2004-03-18	Anderson et al.		
	31.	WO2004/022799			2004-03-18	Anderson et al.		
	32.	WO2004/022800			2004-03-18	Anderson et al.		
	33.	WO2004/026511			2004-04-01	Anderson et al.		
	34.	WO2004/028655			2004-04-08	Anderson et al.		

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

FOREIGN PATENT DOCUMENTS

Exam. Initial*	Cite No	Foreign Document Number ²	Country code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Passgs or Relevant Figs Appear	T ⁵
	35.	WO2004/033736			2004-04-22	Anderson et al.		
	36.	WO2004/033737			2004-04-23	Anderson et al.		
	37.	WO2004/048622			2004-10-06	Anderson et al.		
	38.	WO2005/019485			2005-03-03	Ernst		
	39.	WO2005/021807			2005-03-10	Armstrong et al.		
	40.	WO2005/023725			2005-03-17	Armstrong et al.		
	41.	WO2005/042792			2005-05-12	Armstrong et al.		
	42.	WO2007/044635			2007-04-19	Jacobsen et al.		
	43.	WO2007/089400			2007-08-09	Armstrong et al.		
	44.	WO2008/013518			2008-01-31	Jacobsen et al.		
	45.	WO2008/079115			2008-07-03	Ernst et al.		

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

NON-PATENT LITERATURE DOCUMENTS			
Examiner Initial*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1.	KELTO et al. "Titanium Powder Metallurgy – A Perspective"; Conference: Powder Metallurgy of Titanium Alloys, Las Vegas, Nevada, Feb. 1980, pp. 1-19	
	2.	MAHAJAN et al. "Microstructure Property Correlation in Cold Pressed and Sintered Elemental Ti-6Al-4V Powder Compacts"; Conference: Powder Metallurgy of Titanium Alloys, Las Vegas, Nevada, Feb. 1980, pp. 189-202	
	3.	DeKOCK et al. "Attempted Preparation of Ti-6-4 Alloy Powders from TiCl ₄ , Al, VCl ₄ , and Na"; Metallurgical Transactions B, Volume 18B, Number 1, Process Metallurgy, Sept. 1987, pp. 511-517	
	4.	UPADHYAYA "Metal Powder Compaction", Powder Metallurgy Technology, Published by Cambridge International Science Publishing, 1997, pp. 42-67	
	5.	MOXSON et al. "Production and Applications of Low Cost Titanium Powder Products"; The International Journal of Powder Metallurgy, Volume 34, Number 5, 1998, pp. 45-47	
	6.	ALT "Solid-Liquid Separation, Introduction"; Ulmann's Encyclopedia of Industrial Chemistry, ©2002 by Wiley-VCH Verlag GmbH & Co., Online Posting Date: June 15, 2000, pp1-7	
	7.	GERDEMANN et al. "Characterization of a Titanium Powder Produced Through a Novel Continuous Process"; Published by Metal Powder Industries Federation, 2000, pp. 12.41-12.52	
		MOXSON et al. "Innovations in Titanium Powder Processing"; Titanium Overview, JOM, May 2000, p24	
	8.	GERDEMANN "Titanium Process Technologies"; Advanced Materials & Processes, July 2001, pp. 41-43	
	9.	LÜ et al. "Laser-Induced Materials and Processes for Rapid Prototyping" Published by Springer, 2001, pp. 153-154	
	10.	LEE et al. "Synthesis of Nano-Structured Titanium Carbide by Mg-Thermal Reduction"; Scripta Materialia, 2003, pp. 1513-1518	
	11.	CHANDRAN et al. "TiB _w -Reinforced Ti Composites: Processing, Properties, Application Prospects, and Research Needs"; Ti-B Alloys and Composites Overview, JOM, May 2004, pp. 42-48	
	12.	CHANDRAN et al. "Titanium-Boron Alloys and Composites: Processing, Properties, and Applications"; Ti-B Alloys and Composites Commentary, JOM, May 2004 pp. 32 and 41	
	13.	HANUSIAK et al. "The Prospects for Hybrid Fiber-Reinforced Ti-TiB-Matrix Composites"; Ti-B Alloys and Composites Overview, JOM, May 2004, pp. 49-50	
	14.	KUMARI et al. "High-Temperature Deformation Behavior of Ti-TiB _w In-Situ Metal-Matrix Composites"; Ti-B Alloys and Composites Research Summary, JOM, May 2004, pp. 51-55	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Not for submission under 37 CFR 1.99)

Application Number	10/256,911
Filing Date	07/25/2005
First Named Inventor	Richard Anderson
Art Unit	1723
Examiner Name	
Attorney Docket Number	16561.113

NON-PATENT LITERATURE DOCUMENTS

Examiner Initial*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	15.	SAITO "The Automotive Application of Discontinuously Reinforced TiB-Ti Composites"; Ti-B Alloys and Composites Overview, JOM, May 2004, pp. 33-36	
	16.	YOLTON "The Pre-Alloyed Powder Metallurgy of Titanium with Boron and Carbon Additions"; Ti-B Alloys and Composites Research Summary, JOM, May 2004, pp. 56-59	
	17.	Research Report; P/M Technology News, Crucible Research, August 2005, Volume 1, Issue 2, 2 pages	

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.